Preliminary Agenda for the *Energy Report* Committee Workshop on the Proposed Electricity Resource and Bulk Transmission Data Requests for the *2005 Integrated Energy Policy Report*

Tuesday, December 21, 2004

Welcoming Remarks

Commissioners John L. Geesman and James D. Boyd 2005 Integrated Energy Policy Report (Energy Report) Committee

Introduction and Agenda Review

Kevin Kennedy, Program Manager for the 2005 Energy Report

Integration of 2005 Energy Report with 2006 CPUC procurement and ISO planning

Comment and discussion

Overview of 2005 Electricity and Natural Gas Report

Al Alvarado, Project Manager

Electricity supply and transmission data needs

David Vidaver, Electricity Analysis Office (on electricity supply data needs) Mark Hesters, Engineering Office (on transmission system data needs)

Comment and discussion

Closing Remarks

Commissioners John L. Geesman and James D. Boyd

A preliminary set of draft forms and instructions for the electricity supply data request are provided in the following pages, intended for discussion at the workshop.

Preliminary Set of Draft Forms and Instructions for Electricity Supply Data Request

The Committee Notice for the December 21, 2004 workshop indicated that a detailed set of data request forms and instructions would be posted on December 14, 2004. The staff are working on the proposed forms and instructions for the data identified in the staff report titled, *Proposed Electricity Resource and Bulk Transmission Data Requests for the Integrated Energy Policy Report.* The full set of forms and instructions will be posted in early January. A preliminary set of forms and instructions are provided for discussion purposes at the December 21, 2005 workshop.

All LSEs who served peak loads of 200 MW or more in either 2003 or 2004 will be asked to complete these forms by March 1, 2005. The staff has prepared three forms for Load Serving Entities (LSEs) to report their capacity and energy forecasts for electricity supplies:

Form S-1: Capacity Resource Accounting Table (CRATs). LSEs are asked to report their monthly dependable capacity (MW) estimates through 2016 for several types of existing and planned resources, including those controlled by utilities, and those under contract.

Form S-2: Requests forecast energy production (GWh) from these same generating and contract resources.

Form S-3: Requests LSEs to identify where generic renewable resources (not yet defined as specific projects) will likely be developed. This form asks LSEs to identify amounts of renewable resource capacity that will likely be added between 2006 and 2016 in order to meet renewable energy targets. LSEs are requested to identify both the types of renewable resources they expect to add, and the transmission zone location of these resources, to provide essential input to the statewide strategic transmission plan.

Detailed instructions for these three forms will be posted with the complete set of forms. LSEs will also be asked to report on renewable and bilateral contracts and prepare "ten-year resource plans." LSEs will be requested to prepare a narrative of uncertainties and accrued risks, and comparative evaluations of different alternatives, scenarios, assumptions and contingencies. The staff also requests that LSEs and generators report historical hourly productions data from certain Qualifying Facilities, wind and hydro-generation units.

Electricity Resource Planning Form S-1: Dependable Capacity Resource Accounting Table (CRATs) California Energy Commission -- Staff Proposal

Filing LSE
Contact Name
Contact Number

	Applies To:	PEAK DEMAND CALCULATIONS (MW):	Sum of Rows:	Jan-06	Feb-06	Mar-06	Apr-06	 Dec-16
1	All	Forecast Total Peak Demand						
2	ESP	Peak Demand - Existing Contracts						
3	ESP	Peak Demand - New & Renewed Contracts						
4	IOU	Direct Access (-)						
5	IOU	CCA & Departing Municipal Load (-)						
6	IOU	Uncommitted Price Sensitive DR Programs (-)						
7	IOU	Uncommitted Energy Efficiency (2009-2016) (-)						
8	IOU	Distributed Generation (-)						
9	All	Net Peak Demand for Bundled Customers	Sum 1 thru 7					
10	IOU/ESP	Net Peak Demand + 15% Planning Reserve Margin	Product 9 x 1.15					
11	IOU/Muni	Firm Sales Obligations						
12	All	Final Peak Demand	Sum 10 + 11					
		EXISTING & PLANNED RESOURCES						
		Utility-Controlled Fossil and Nuclear Resources:						
13	IOU/Muni	Unit 1 [List each fossil and nuclear resource.]						
14	IOU/Muni							
15	IOU/Muni	Unit N						
16	IOU/Muni	Total Dependable Fossil and Nuclear Capacity	Sum 13 thru 15					
		Utility-Controlled Hydroelectric Resources (1-in-2	2):					
17	IOU/Muni	Total for all plants over 30 MW nameplate						
18	IOU/Muni	Total for all plants 30 MW nameplate or less						
19	IOU/Muni	Hydro Derate (-) for 1-in-5 conditions						

Electricity Resource Planning Form S-1: Dependable Capacity Resource Accounting Table (CRATs) California Energy Commission -- Staff Proposal

20	IOU/Muni	Hydro Derate (-) for 1-in-10 conditions				
21	IOU/Muni	Total Dependable Hydro Capacity	Sum 17 thru 19			

Electricity Resource Planning Form S-1: Dependable Capacity Resource Accounting Table (CRATs) California Energy Commission -- Staff Proposal

		1			 	<u> </u>
	9					
	Unit 1 (fuel) [List each non-hydro resource.]					
IOU/Muni						
IOU/Muni	Unit N (fuel)					
IOU/Muni	Total Renewable Dependable Capacity	Sum 22 thru 24				
IOU/Muni	Total Utility-Controlled Physical Resources	Sum 16 + 21 + 25				
	EXISTING & PLANNED CONTRACTUAL RES	SOURCES				
	DWR Contracts:					
IOU	Contract A					
IOU						
IOU	Contract N					
IOU	Total DWR Contracts	Sum 27 thru 29				
	QF Contracts by fuel types:					
IOU, LADWP	Natural gas					
IOU, LADWP	Biofuels					
IOU, LADWP	Geothermal					
IOU, LADWP	Small Hydro					
IOU, LADWP	Solar					
IOU, LADWP	Wind					
IOU, LADWP	Other					
IOU, LADWP	Total QF Dependable Capacity	Sum 31 thru 37				
	Existing & Planned Renewable Contracts:					
All	Contract A					
All						
All	Contract N					
All	Total Existing & Planned Renewable Contracts	Sum 39 thru 41				
	IOU/Muni IOU/Muni IOU/Muni IOU/Muni IOU IOU IOU IOU IOU IOU IOU, LADWP	IOU/Muni Unit N (fuel) IOU/Muni Total Renewable Dependable Capacity IOU/Muni Total Utility-Controlled Physical Resources EXISTING & PLANNED CONTRACTUAL RESOURCES DWR Contracts: IOU Contract A IOU IOU Contract N IOU Total DWR Contracts QF Contracts by fuel types: IOU, LADWP Natural gas IOU, LADWP Geothermal IOU, LADWP Small Hydro IOU, LADWP Solar IOU, LADWP Wind IOU, LADWP Other IOU, LADWP Total QF Dependable Capacity Existing & Planned Renewable Contracts: All Contract N	IOU/Muni	IOU/Muni Unit I (fuel) [List each non-hydro resource.] IOU/Muni IOU/Muni Unit N (fuel) IOU/Muni Total Renewable Dependable Capacity Sum 22 thru 24 IOU/Muni Total Utility-Controlled Physical Resources Sum 16 + 21 + 25 EXISTING & PLANNED CONTRACTUAL RESOURCES DWR Contracts: IOU Contract A IOU IOU Contract N IOU Total DWR Contracts Sum 27 thru 29 QF Contracts by fuel types: IOU, LADWP Natural gas IOU, LADWP Geothermal IOU, LADWP Geothermal IOU, LADWP Solar IOU, LADWP Wind IOU, LADWP Other IOU, LADWP Total QF Dependable Capacity Sum 31 thru 37 Existing & Planned Renewable Contracts: All Contract A All All Contract N	IOU/Muni Unit 1 (fuel) [List each non-hydro resource.] IOU/Muni Unit N (fuel) IOU/Muni Unit N (fuel) IOU/Muni Total Renewable Dependable Capacity Sum 22 thru 24 IOU/Muni Total Utility-Controlled Physical Resources Sum 16 + 21 + 25 EXISTING & PLANNED CONTRACTUAL RESOURCES DWR Contracts: IOU Contract A IOU IOU Contract N IOU Total DWR Contracts Sum 27 thru 29 QF Contracts by fuel types: IOU, LADWP Natural gas IOU, LADWP Biofuels IOU, LADWP Geothermal IOU, LADWP Small Hydro IOU, LADWP Solar IOU, LADWP Wind IOU, LADWP Other IOU, LADWP Total QF Dependable Capacity Existing & Planned Renewable Contracts: All Contract A All All Contract N	IOU/Muni

Electricity Resource Planning Form S-1: Dependable Capacity Resource Accounting Table (CRATs) California Energy Commission -- Staff Proposal

					1		
		Other Bilateral Contracts:					
43	All	Contract A					
44	All						
45	All	Contract N					
46	All	Total Other Bilateral Contracts	Sum 43 thru 45				
47	All	TOTAL: EXISTING & PLANNED CAPACITY	= 26+30+38+42+46				
48	IOU/Muni	Existing Interruptible / Emergency (I/E) Programs (-))				
49	IOU	Uncommitted Dispatchable Demand Response (-)					
50	All	TOTAL CAPACITY + I/E and UDDR	Sum 47 thru 49				
		FUTURE GENERIC RESOURCE NEEDS					
51	All	Generic Renewable Resources					
				·			
		Non-Renewable Generic Resources:					
52	All	Capacity for Baseload Energy					
53	All	Capacity for Load-following and Peaking Energy					
54	All	Load-Following (year-round) Capacity					
55	All	Peaking (seasonal) Capacity					
56	All	Total Capacity of Non-Renewable Generic Resource	Sum 52 thru 55				
57	All	Total Capacity of Future Generic Resources	Sum 51 + 56				

Electricity Resource Planning Form S-2: Energy Balance Resource Accounting Table California Energy Commission -- Staff Proposal

Filing LSE
Contact Name
Contact Number

	Applies To:	ENERGY DEMAND CALCULATIONS (GWh)	Sum of Rows:	Jan-06	Feb-06	Mar-06	Apr-06	••••	Dec-16
1	All	Forecast Total Energy Demand					1		
2	ESP	Energy Demand - Existing Contracts							
3	ESP	Energy Demand - New & Renewed Contracts							
4	IOU	Direct Access (-)							
5	IOU	CCA & Departing Municipal Load (-)							
6	IOU	Uncommitted Energy Efficiency (2009-2016) (-)							
7	IOU	Distributed Generation (-)							
8	All	Net Energy Demand for Bundled Customers	Sum 1 thru 7						
9	IOU/Muni	Firm Sales Obligations							
10	All	Final Energy Demand	Sum 8+9						
		EXISTING & PLANNED RESOURCES							
		Utility-Controlled Fossil and Nuclear Resources:							
11	IOU/Muni	Unit 1 [List each fossil and nuclear resource.]							
12	IOU/Muni								
13	IOU/Muni	Unit N							
14	IOU/Muni	Total Fossil and Nuclear Energy Supply	Sum 11 thru 13						
		Utility-Controlled Hydroelectric Resources (1-in-2							
15	IOU/Muni	Total for all plants over 30 MW nameplate							
16	IOU/Muni	Total for all plants 30 MW nameplate or less							
17	IOU/Muni	Hydro Derate (-) for 1-in-5 conditions							
18	IOU/Muni	Hydro Derate (-) for 1-in-10 conditions Page 1	of 5						

DRAFT--- For discussion at the December 21, 2004 Workshop in Sacramento Electricity Resource Planning Form S-2: Energy Balance Resource Accounting Table California Energy Commission -- Staff Proposal 19 IOU/Muni Total Hydro Energy Supply Sum 15 thru 18

Electricity Resource Planning Form S-2: Energy Balance Resource Accounting Table California Energy Commission -- Staff Proposal

- 1						 	
		Existing & Planned Renewable Energy:					
20	IOU/Muni	Unit 1 (fuel) [List each non-hydro resource.]					
21	IOU/Muni						
22	IOU/Muni	Unit N (fuel)					
23	IOU/Muni	Total Renewable Energy Supply	Sum 20 thru 23				
24	IOU/Muni	Total Utility-Controlled Physical Resources	Sum 14 + 19 + 23				
		EXISTING & PLANNED CONTRACTUAL RE	SOURCES				
		DWR Contracts:					
25	IOU	Contract A					
26	IOU						
27	IOU	Contract N					
28	IOU	Total Energy Supply from DWR Contracts	Sum 25 thru 27				
				•	-		
		QF Contracts by fuel types:					
29	IOU, LADWP	Natural gas					
30	IOU, LADWP	Biofuels					
31	IOU, LADWP	Geothermal					
32	IOU, LADWP	Small Hydro					
33	IOU, LADWP	Solar					
34	IOU, LADWP	Wind					
35	IOU, LADWP	Other					
36	IOU, LADWP	Total Energy Supply from QF Contracts	Sum 29 thru 35				
·				•			
		Existing & Planned Renewable Contracts:					
37	All	Contract A					
38	All						
39	All	Contract N Page	2 65				

DRAFT--- For discussion at the December 21, 2004 Workshop in Sacramento Electricity Resource Planning Form S-2: Energy Balance Resource Accounting Table California Energy Commission -- Staff Proposal 40 All Total Existing & Planned Renewable Contracts Sum 37 thru 39

Electricity Resource Planning Form S-2: Energy Balance Resource Accounting Table California Energy Commission -- Staff Proposal

			I	1	1	1	1
		Other Bilateral Contracts:					
41	All	Contract A					
42	All						
43	All	Contract N					
44	All	Total Energy Supply from Other Bilateral Contracts	Sum 41 thru 43				
		Spot Market Purchases					
45	IOU/ESP	Spot Market Purchases					
46 All		TOTAL: EXISTING & PLANNED ENERGY	24+28+36+40+44+	45			
		FUTURE GENERIC RESOURCE NEEDS					
47	All	Generic Renewable Energy					
		Non-Renewable Generic Resources:					
48	All	Generic Baseload Energy					
49	All	Generic Load-following and Peaking Energy					
50	All	Generic Load-Following (year-round) Energy					
51	All	Generic Peaking (seasonal) Energy					
52	All	Total Non-Renewable Generic Energy Needs	Sum 48 thru 51				
53	All	Total Future Generic Resource Needs	Sum 47 + 52				

Electricity Resource Planning Form S-3: Generic Renewable Capacity and Energy Locations California Energy Commission -- Staff Proposal

Filing LSE
Contact Name
Contact Number

GENERIC REN												
LOCATION	FUEL TYPE	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Local	Biofuels											
"	Geothermal											
"	Small Hydro											
"	Solar											
"	Wind											
"	Other											
NP15	Biofuels											
"	Geothermal											
"	Small Hydro											
"	Solar											
"	Wind											
"	Other											
SP15	Biofuels											
"	Geothermal											
"	Small Hydro											
"	Solar											
"	Wind											
"	Other											
Imperial Valley	Biofuels											
"	Geothermal											
"	Small Hydro											
"	Solar											
"	Wind											
"	Other											
Other (specify)	Biofuels											
"	Geothermal											
"	Small Hydro											
"	Solar											
"	Wind											

Electricity Resource Planning Form S-3: Generic Renewable Capacity and Energy Locations California Energy Commission -- Staff Proposal

Camorina Energy Commission Stair 1 Toposai												
"	Other											
TOTAL MW (st												
GENERIC REN		ERGY	/ (Pro	iected	l GWI	h):						
LOCATION	FUEL TYPE						2011	2012	2013	2014	2015	2016
Local	Biofuels											
"	Geothermal											
"	Small Hydro											
"	Solar											
"	Wind											
11	Other											
NP15	Biofuels											
"	Geothermal											
"	Small Hydro											
"	Solar											
"	Wind											
"	Other											
SP15	Biofuels											
"	Geothermal											
"	Small Hydro											
"	Solar											
"	Wind											
"	Other											
Imperial Valley	Biofuels											
"	Geothermal											
"	Small Hydro											
"	Solar											
11	Wind											
"	Other											
Other (specify)	Biofuels											
"	Geothermal											
"	Small Hydro											
"	Solar											
11	Wind											
"	Other											
TOTAL GWh (sum of above):											